



OBSERVED RESULTS OF THE EXPERIMENTAL AGRICULTURAL
CONSERVATION PROGRAM IN BOONE COUNTY, INDIANA

Boone County, Indiana, was one of several counties in the United States that adopted an especially modified form of the Agricultural Conservation Program in 1939. Because the program operated experimentally in Boone County is different from the program of any other county, as well as from the Regional program, its results are of special significance and they were studied in a research project conducted in June of this year. They are presented in summary form in this paper.

The principal features of the Boone plan pertain to the method of computing maximum payments on individual farms and involve special calculations for the payments. Under the Regional program the maximum payment or farm allowance is based upon the acreages in the allotments and upon the productivity index and normal yields. In Boone County only one-third of the allowance is calculated according to the Regional methods and the remainder is made proportional to the size of the "diversion goal". The diversion goal for corn or other special or general depleting crops is the difference between the average acreage planted in the 3 years - 1936 through 1938 and the 1939 allotment.

All the allotments for Boone County farms are set in the same way as in the Regional program. The payment rates for soil-building practices and the determination of soil-building goals also are similar to the Regional program.

The specific rates of payment for full performance under the 1939 Regional and Boone County programs, where corn, wheat, and total depleting allotments are given, are as follows:

Regional

Corn - Allotment X Normal Yield X \$0.09
Wheat - Allotment X Normal Yield X \$0.17
General Depleting - Allotment X Productivity
Index X \$0.99

Boone County

Corn - (Allotment X Normal Yield X \$0.03) plus (Diversion Goal X Normal
Yield X \$0.25)
Wheat - (Allotment X Normal Yield X \$0.06) plus (Diversion Goal X Normal
Yield X \$0.25)
General Depleting - (Allotment X Productivity X \$0.50) plus (Diversion Goal
X Productivity Index X \$5.00)

There are complementary changes in the manner of computing deductions from maximum payments for excess acres.

A method of payment based partly on diversion goals was suggested, as a result of a number of studies of the Regional program which were made in 1938. These studies indicated that there was a marked difference from farm to farm in the reduction from average acreages of previous years necessary to meet allotments. The farm allowance per acre of acreage reduction necessary was high on farms whose allotments were closely in line with past practice, and low on farms on which large reductions were necessary. And it appeared that farms with large adjustments to make in proportion to recent acreages tended to remain out of the program.

The object of the Boone program was to compensate in some measure for the observed differences between farms which appeared to reduce participation and adjustment. It was designed to obtain higher participation and better acreage adjustments and, in addition, a more equitable distribution of funds.

This report was prepared from data obtained in a research study of 426 sample farms which was made by the Divisions of Program Development and Coordination and Farm Management and Costs of the Bureau of Agricultural Economics, the Agricultural Adjustment Administration, and the Purdue University Agricultural Experiment Station. Additional copies of this report are available in the Division of Program Development and Coordination of the Bureau of Agricultural Economics.

Participation and Acreage Adjustments Obtained

Comparisons of the results of the special program in Boone County and the Regional program in counties adjoining Boone are presented in this report according to several objectives of a Conservation Program.

Data are given on the next page on the number of farms that participated in Boone and in adjoining areas during recent years. In addition to total figures, there is a breakdown according to the amount of adjustment in corn acreage required; in other words, according to the diversion goal for corn.

It should be noted that the groups of farms in this breakdown are the same throughout tables 1 to 5, and that the various tables may be compared with each other.

The amount of participation and adjustment obtained may depend in part on factors not measured in this report. An effort has been made, however, to include all those that are important in the analysis.

In 1939, 63 percent of the sample farms were in the Agricultural Conservation Program in Boone County, and 54 percent participated in adjoining counties. This difference occurred even though Boone had been only an average county, with no better record than its neighbors, in the years before 1939 when it had the regular Regional program.

The difference between Boone and adjoining counties appeared almost entirely in the fourth and fifth - the large adjustment - groups. In the first three groups, with the exception of the nonadjustment group which is irregular and statistically unreliable, there is little significant difference between Boone County and the counties adjoining it.

Table 1.- Extent of participation in Boone County and adjoining counties, 1939 compared with earlier years

Adjustment in	:	:	Percent farms in program					Percent change	
Corn acres from	:	Number :						to 1939 from	
1936-38 planted	:	of :	:	:	Av. %:	:	:	1936-	:
Required per 100	:	farms :	1936:	1937:	1938:	1936-:	1939:	38	1938
acres in Cropland	:	:	:	:	38 :	:	:	Average :	:
<u>acres</u>									
<u>Boone County</u>									
none		19	32	21	47	33	26	- 21	- 45
0.1 to 4.7		54	68	58	85	70	67	- 4	- 21
4.8 to 8.1		54	43	31	52	42	70	/ 67	/ 35
8.2 to 12.9		52	52	17	23	31	62	/ 100	/ 170
13.0 and up		37	46	11	11	23	65	/ 183	/ 491
Total		216	51	30	46	42	63	/ 50	/ 37
<u>Adjoining counties</u>									
none		31	29	32	55	39	61	/ 56	/ 11
0.1 to 4.7		48	57	53	67	59	65	/ 10	- 3
4.8 to 7.9		47	53	34	68	52	55	/ 6	- 19
8.0 to 12.9		46	34	23	50	36	54	/ 50	/ 8
13.0 and up		38	37	21	5	21	32	/ 52	/ 540
Total		210	43	33	50	42	54	/ 29	/ 8

In Boone County corn is the major crop. The success of both the Boone and the Regional programs in obtaining acreage performance on corn is measured in terms of acres of cropland in table 2.

A farm that is participating in the conservation program is in corn performance if the corn acreage is smaller than the allotment, or, if larger, does not exceed the allotment so much as to draw a deduction that is larger than the allowance.

Table 2.- Extent of corn performance on participating farms, 1938 and 1939

Adjustment required from 1936-38 planted per 100 acres in Cropland	:	Percent of cropland in corn performance on participating farms /1	:	Percent change 1938 to 1939
	:	1938	:	1939

acres

Boone County

none	61	46	.. 25
0.1 to 4.7	90	77	.. 14
4.8 to 8.1	44	72	/ 64
8.2 to 12.9	19	63	/ 232
13.0 and up	8	68	/ 750
Total	48	69	/ 44

Adjoining counties

none	69	73	/ 6
0.1 to 4.7	80	82	/ 2
4.8 to 7.9	65	58	.. 11
8.0 to 12.9	39	51	/ 31
13.0 and up	5	29	/ 480
Total	56	61	/ 9

/1. Percent of all cropland in the sample that is on farms in full or partial corn-acreage performance with respect to the corn allotment and also on fully or partially participating farms. Farms in performance with respect to the corn allotment are eliminated from the table unless they have indicated intention to participate in the program and performance with respect to other features of the program is such as to earn a net payment for the farm. Although the difference in the deductions for excess acres in the two programs affect somewhat the determination of partial performance, it appears that in general this difference would not materially influence the results indicated in this table.

Participation itself is, of course, only part of the story. Another goal is acreage adjustment. The participating farms in the sample area in Boone County reduced their corn acreage in 1939 to the extent of 954 acres below the 1936-38 average. The participating farms in counties adjoining Boone made a reduction of 695 acres. The histories, allotments, and diversion goals for the two samples were practically equal.

Further data on acreage adjustments on all farms as well as on participating farms are presented in the table below as percentages of the total adjustments required by the allotments.

Table 3.- Extent of corn acreage adjustment obtained on all farms and on participating farms, 1938 and 1939

Adjustment re- quired from 1936-38 planted per 100 acres in Cropland	: Percent of re- quired adjustment obtained on all farms	: Percent change, 1938 to 1939	: Percent of required adjustment obtained on participating farms /3	: Percent change, 1938 to 1939
	: 1938 /1: 1939 /2	: 1939	: 1938 /1 : 1939 /2	: 1939
acres				

Boone County

nono	-	-	-	-	-	-
0.1 to 4.7	132	36	- 73	134	112	- 16
4.8 to 8.1	73	55	- 25	48	79	/ 65
8.2 to 12.9	27	62	/ 130	25	67	/ 168
13.0 and up	-	63	/ ∞	7	71	/ 914
Total	41	52	/ 27	47	77	/ 64

Adjoining counties

nono	-	-	-	-	-	-
0.1 to 4.7	146	12	- 92	115	107	- 7
4.8 to 7.9	89	55	- 38	87	74	- 15
8.0 to 12.9	49	62	/ 29	37	55	/ 49
13.0 and up	-	67	/ ∞	2	27	/ 1250
Total	59	53	- 10	49	56	/ 14

/1. From 1936-37 planted history

/2. From 1936-38 planted history

/3. Note that in many cases the overplanting on nonparticipating farms caused the adjustment that was made by participators to exceed that which appeared on all farms.

Reasons that led to the adoption of an experimental plan were explained in the opening paragraphs, and in the preceding text and tables it was shown that the Boone County program most nearly approached its objectives in the large adjustment groups.

An analysis of the actual acreage adjustments required in relation to payments offered is given in table 4. In the Regional-program counties adjoining Boone, the second adjustment group had 29 percent of the cropland but was asked to contribute only 9 percent of the adjustment required, and was offered 27 percent of the payment. The fifth group, with 12 percent of the cropland, was offered 12 percent of the corn allowance for making 37 percent of the acreage adjustment.

In Boone County the second group, with percentages of cropland and of adjustment required identical to those for adjoining counties, could receive 16 percent of the payment. The fifth adjustment group had 12 percent of the cropland, was expected to provide 31 percent of the adjustment, and was offered 24 percent of the corn allowance.

Table 4.- Comparison of adjustments required and payments offered among the several adjustment groups

Adjustment in Corn acres from 1936-38 planted Required per 100 acres in Cropland	: Percentage : distribution : of : acres of : cropland	: Percentage : distribution : of acres of : adjustment : required	: Percentage : distribution : of corn : allowance : /1	: Corn allow- : ance offered : per acre : adjustment : required
<u>acres</u>				
<u>Boone County</u>				
none	6.0	- 1.9	1.9	∞
0.1 to 4.7	29.4	9.4	16.0	\$ 48.77
4.8 to 8.1	27.1	24.3	24.6	23.27
8.2 to 12.9	25.4	37.0	33.0	18.35
13.0 and up	12.1	31.2	24.5	14.32
Total	100.0	100.0	100.0	\$ 22.27/2
<u>Adjoining counties</u>				
none	10.3	- 7.8	9.4	∞
0.1 to 4.7	28.8	8.9	27.3	\$ 74.16
4.8 to 7.9	25.6	25.4	26.0	24.79
8.0 to 12.9	23.2	36.6	24.8	16.41
13.0 and up	12.1	36.9	12.5	7.80
Total	100.0	100.0	100.0	\$ 24.05/2

- /1. Conservation plus price adjustment allowances.
- /2. These two values for Boone and adjoining counties would have been equal if all farms had been studied.

Table 5.- Summary of the percentages of participation and other factors of comparison of the special program in Boone with the Regional program in counties adjoining Boone

	Percent change : % change Boone in : % change ad- Boone Adjoining: joining County counties : counties		
1. Participation of farmers - 1939 compared with 1936-38	/ 50	/ 29	1.7
2. Participation of farmers - 1939 compared with 1938	/ 37	/ 8	4.6
3. Participation on high-producing land, 1939 vs. 1938	/ 7	/ 2	3.5
4. Participation on low-producing land, 1939 vs. 1938	/ 82	/ 15	5.5
5. Participation on farms of small size, 1939 vs. 1938	/ 52	/ 23	2.3
6. Participation on farms of medium size, 1939 vs. 1938	/ 33	/ 6	5.5
7. Participation on farms of large size, 1939 vs. 1938	/ 33	- 6	-
8. Percent of cropland in corn performance and participating, 1939 vs. 1938	/ 44	/ 9	4.9
9. Percent of corn allowance earned, 1939 vs. 1938	/ 53	/ 15	3.5
10. Percent of required corn acreage adjustment obtained, 1939 vs. 1938	/ 27	- 10	-
11. Percent of corn acreage adjustment required on all farms obtained on participating farms, 1939 vs. 1938	/ 64	/ 14	4.6
12. Percent of wheat farms in wheat performance and participating, 1939 vs. 1938	/ 225	/ 42	5.4
13. Acres legume and grass seed sown, 1939 vs. 1938	/ 24	/ 28	0.9
	Obtained in 1939		
14. Corn adjustment obtained per \$100. spent - acres	5.2	3.8	1.4
- bushels	182	137	1.3

